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ABSTRACT

Because of the graphical interface and "openness" of the operating system, Macintosh computers are susceptible to undesirable changes by the user. This presentation discusses the advantages and disadvantages of software packages that offer protection for the Macintosh system. The two basic forms of software security packages include a package that provides protection by masking the interface a user would see on an unprotected system, and a package the protects the system while maintaining the standard operating system. A description of three specific packages is provided, including control features, comments and costs. (AEF)

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Macintosh Computer Classroom and Laboratory Security: preventing unwanted changes to the system.

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Abstract:

Because of the graphical interface and "openness" of the operating system, Macintosh computers are susceptible to undesirable changes by the user. The changes take the form of software added to the computer, software removed from the computer, or changes to the control panels. The basis of these user changes is usually out of ignorance but often comes from maliciousness. Personnel responsible for administrating classrooms and laboratories must spend time reconfiguring the systems. This presentation will discuss the pros and cons of some of the software packages that offer protection for the Macintosh system.

Body:

There are two basic forms of software security packages for Macintosh. One type of package provides protection by masking the interface a user would see on an unprotected system. The most common example of this is the program "At Ease" by Apple Computer Inc. In these programs, the administrator decides what applications will be available to users. Users can not get to the portion of the operating system that would allow them to make unwanted changes. While this approach is very functional, it removes the user from the standard operating system. Many faculty members and teachers who teach computer technology related courses prefer to maintain the normal Macintosh operating system but have added protection.

The second basic form of security package protects the system while maintaining the standard operating system. There are a number of packages available to do this and each has its own, specialized approach to protection. This session will review three products that offer desktop security but maintain the Macintosh interface (see below). The topics will cover installation, security provided, and implications for computer classroom administrators and instructors.

"FoolProof" by SmartStuff Software.
PO Box 82284, Portland, OR 97282
Tel: 503-775-2821
FoolProof has four Control settings sections.

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1. Desktop Control.
   - Prevent dragging and renaming of files and folders. This disables copying or moving individual files or applications.
   - Disable desktop altering menu items (New Folder, Duplicate, Make Alias, Clean up, etc). Also disables Sharing setup and Get Info.
   - Lock the document in the Get Info dialog box so that users can not change a stationery document
   - Specify a designated folder for saving on the hard disk.
2. File Saving
   - Direct all file saving to floppy disks, network volumes, or specialized folders designated by the administrator.
   - Dialog boxes are used to tell the user where saving is permitted.
3. Program Control
   - Prevent users from opening control panels.
   - Prevent users from opening the Chooser.
   - Prevent users from starting applications from floppy disks.
4. Preferences
   - Prevent users from changing a hard drive by restarting from a disk or holding down the shift key.
   - Has a keyboard override capability.
   - Disable the snap shot capability (command-shift-3).
   - Lock hard disk on shutdown and restart.

Comments: These is considered a weaknesses.

- Users can relocate, resize, and change the view of a window. These changes remain in effect when the next user comes to the computer.
- When control panels are locked, all of them are locked. The administrator cannot decide to allow access to selected control panels.
- A user can save a file on the desktop of a floppy disk. The user is then unable to delete or move the file.

Costs:

Single User - $39.00, 10 pack - $179.00, 30 pack - 349.00, Building License $589.00, District Licenses available.

Other services for extra cost:

- File Security: Protects confidential documents and applications, encryption available.
- Screen Saver.
- Toner Saver: limits the amount of toner used on draft copies.

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"Mac Control" by BDW Software
1410 Rocky Lane, St. Paul, MN 55122
Tel: 800-726-5462 Fax 612-452-4902

Mac Control uses a special folder called the Control Folder. Setup and administrative changes occur from files in this folder. The contents can be seen only by the manager who has access via a password. Mac Control also creates four special folders called Public, Shared, General, Special. A variety of users (for example students, advanced students, teacher assistants, teacher, administrator) can be assigned by the administrator depending on user needs. These users can each have their own accessibility to the special folders and the hard drive. A series of user definition windows allow the administrator to determine the control settings.

- May or may not work on floppy/server/personal/general/ or any folder.
- May or may not see contents of special folders.
- May or may not use Command Shift 1/2/3
- May or may not lock or unlock files
- May or may not duplicate applications
- May or may not launch applications from floppies
- May or may not modify any finder window display.
- May or may not use specified DA's or Apple Menu Items (Chooser, Control Panels, and two other of administrator's choice) o Make certain applications available for use during only certain hours of the day. This is specified from a list of all applications available on the hard drive.
- Make the mouse automatically move to the default button of a dialog box.
- Disable the System 7 Application Menu.
- Lock the hard disk on shutdown and restart.
- Restricting the number of copies to Print.

Comments:

A new version was released at the time of this writing.

Costs: Single User - $59.00, 5 pack - $129.00, 10 pack - $229.00, Building License $399.00, 5 buildings $1199.00, 15 buildings $3299.00.

Other services for extra cost:

- A junior version with the most common control features for less cost than the full version.
- Mac Control Pro. Includes the full version of Mac control and limited versions of the two products listed below. o Remote Control: Allows an administrator to control functions from a single machine, i.e. updating settings, install new software, override the keyboard and mouse during instructional settings. o Digital Ditto: Can copy selected files and folders from a source Mac to multiple destination Macs.

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"MacPrefect" by Hi Resolution Inc.
The Tannery Complex, 12 Federal Street, Suite 46, Newburyport, MA 01950. Tel: 800-455-0888 Fax: 508-463-9619 Applelink:hi.res.us.

MacPrefect has nine settings tools.

1. Folder Control: Maintains folder structure, maintains file and folder names, prevents files from being saved in unauthorized locations, stops users from throwing away files and applications.
2. Copy Control: Prohibits copying of certain file types, e.g. application files and control panels.
3. Folder Sweep: A folder can be created to allow users to save information. Files can be removed after they have been there for a certain period of time or after the folder reaches an administrator specified amount of memory.
4. Control Panels: The administrator can selectively restrict access to control panels.
5. Launch Control: Prohibits launching of unauthorized software.
6. MacShifty: Disables the shift key startup feature that would turn off extensions.
7. Disk Name Control: Disable the ability to change the name of the hard drive.
8. Screenshot Lock: Disable the snap shot capability (command-shift-3)
9. DiskPrefect: Locks the hard disk if the user starts up from a different system.

Comments: Some dragging is allowed at lower levels within the hierarchy. If there are many layers of folders, some files in lower layers can be moved to other folders.

Costs:

1-4 $49/copy; 5-24 $39/copy; 25-49 $30/copy; 50-99 $27/copy; 100-199 $24/copy.

Other services for extra cost:

- MacVisa: Allows student logon to be sure that the right users are on the right machines using the right software and peripherals.